



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,227	01/22/2001	Hidetaka Higashino	NAK1-BN65	3963

21611 7590 09/01/2004

SNELL & WILMER LLP
1920 MAIN STREET
SUITE 1200
IRVINE, CA 92614-7230

EXAMINER

DONG, DALEI

ART UNIT	PAPER NUMBER
----------	--------------

2879

DATE MAILED: 09/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,227

Applicant(s)

HIGASHINO ET AL.

Examiner

Dalei Dong

Art Unit

2879

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 52 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A step of exhausting the cleansing gas is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). In line 21 of Claim 52, Applicant claims apply a cleansing gas after the envelope is sealed, however fails to claim a step of exhausting the cleansing gas before the discharge gas is applied.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,236,159 to Inoue in view of U.S. Patent No. 4,427,479 to Glaser in further view of U.S. Patent No. 5,285,678 to McDaniel.

Regarding to claim 52, Inoue discloses a method of producing a gas discharge panel (1 shown in Figure 1), comprising: providing a first plate (21) with partition walls (29) and a phosphor layer (28B, 28R, 28G); providing a second plate (11); providing a sealing material (32 shown in Figure 3) on at least one of the first and plate and second plate; forming an envelop of the second plate over the first plate to enable partition walls to form light emitting cells (shown in Figure 1); applying a dry gas to the envelope; exhausting gases from the envelope while heating the envelope below a sealing temperature of the sealing material for a sufficient time period to enable burn out of binding material of the sealing material; monitoring the gas pressure applied to the inside of the envelope; increasing the heat applied to the sealing material at the sealing temperature to enable softening of the sealing material (see column 7, lines 1-25); lowering the temperature applied to the sealing material to solidify a peripheral seal; gradually lower the temperature to ambient temperature and applying a discharge gas to the sealed envelope and finally closing the gas passageway to seal the discharge gas within the envelop.

However, Inoue does not disclose determining from the gas pressure monitoring, when the gas pressure is increase in the envelope; lowering an internal pressure in the envelope, based on the monitoring of gas pressure, below an external pressure to apply a force to assist sealing of the first plate to the second plate. Glaser teaches lowering the internal pressure in the envelope based on the monitoring of the gas pressure, below an external pressure to apply a force to assist sealing of the first plate to the second plate

Art Unit: 2879

(see column 2, lines 60-67) for the purpose of eliminating the need to exert any substantial tensile, sheer or compressive force on the plates.

Also, Inoue does not disclose applying a cleansing gas after the envelope is sealed and continuing to monitor the gas pressure applied within the envelope to determine any leaks in the peripheral seal. It is old and well known in the art to apply a testing or cleansing gas after the envelope is sealed to determine any leakage within the envelope. McDaniel teaches monitor the gas pressure applied within the envelope to determine any leaks in the peripheral seal (see column 12, line 66 to column 13, line 30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have utilize the pressure differential to apply external pressure of Glaser along with the old and well known leakage detection method of McDaniel for the method of producing a gas discharge panel of Inoue in order to eliminating the need to exert any substantial tensile, sheer or compressive force on the plates and further provide a nondestructively testing sealed panel to proof test for seal leaks present in the discharge panel.

Response to Arguments

5. Applicant's arguments with respect to claim 52 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following prior art are cited to further show the state of the art of composition of a method of producing a gas discharge panel.

U.S. Patent No. 4,849,674 to Cherry.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2879

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalei Dong whose telephone number is (571)272-2370. The examiner can normally be reached on 8 A.M. to 5 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571)272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



D.D.

August 30, 2004



Joseph Williams
Primary Examiner
Art Unit 2879